Potat-OS Operating System M6 Users guide

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# Preface

Welcome to the user’s manual for the PotatOS! This manual will serve as a reference and guide for anyone to download, install, and use the PotatOS. We have documented every step that a user may need to operate the PotatOS. There is also a Help Section at the end of this manual. Thank you for using PotatOS!

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# Definitions and Abbreviations

* Command – A command is an operation that performs a specific task as specified by the command’s description. A user can request a command to be performed while using the PotatOS
* Flags/Options/Parameters – A flag is special parameter that the user can append to a command to alter or modify the output of that command. Not every command has flags and not all flags operate the same
* Potato Operating System (PotatOS) – The operating system that the user will be interacting with while using this product

# Downloading the PotatOS

PotatOS is a private operating system. If you would like to download and use the PotatOS, you must request access to the developers of PotatOS. You may find the developers contact information in the *How to Get Help* section. Please email one of the developers to get access to the PotatOS.

Once you have confirmed your access with one of the developers, you may begin the download process for PotatOS. The developers use the git protocol with the bitbucket git repository. Once you are ready, proceed to the bitbucket git repository and download the entire project to your local system. This is the process to download the PotatOS.

# Building the PotatOS – Module Six

The PotatOS is designed to be built before use. This is a very important step. If the PotatOS is not built before attempting to run, it will not work at all. Below are the steps to build the PotatOS.

1. Navigate to the root of the PotatOS directory
2. Change directory to module\_6
3. Inside the module\_6 there will be a file called MakeFile
4. To initiate the creation of PotatOS, type *make* into your terminal environment

If there are any issues with the above steps, please reach out to a developer for assistance. You can find the developers contact information in the *How to Get Help* section.

# Launching the PotatOS

To launch the PotatOS, you must first build the PotatOS. If you have not built the system yet, please refer to the section *Building the Potato Operating System*. Follow the instructions below to launch the PotatOS.

1. Navigate to the root directory of the PotatOS directory
2. Change directory to module\_6
3. Execute the following command inside your terminal environment  
   *./module6 <path to your FAT12 image>*

The PotatOS M6 will begin, and you should be at the PotatOS M6 command line input. At this point, PotatOS M6 is ready to begin standard operation and accept input from the user.

# Command Option Syntax

In the following section we will be covering all of the commands and functionality that PotatOS has to offer. But before we start reviewing the power of PotatOS, we need to explain the syntax of the command options.

There are two type of markings that you may see when reading this documentation concerning arguments for PotatOS commands. They are “less than & greater than” quotations and square brackets quotations.

The “less than & greater than” is used to signify something that is necessary to the command operation. It looks as follows *<command name>*. If this syntax is used in a command, it MUST be used, or the command will fail. It is usually used to specify a name or some specific reference to the command.

The square brackets is used for optional arguments to a command. They have a multitude of meanings and they are independent per command. An argument *-a* for one command may not mean the same thing for another command. In some commands, if an optional command is not used, there is a default value that will be set. In others, that argument will just be skipped. Please fully read this document to understand how these arguments will work while using PotatOS.

# Using the PotatOS M6

Since the PotatOS is a command line operating system, you will have to issue commands through your keyboard. All commands and their features will be keyboard driven for the PotatOS. To get more information about the induvial commands that can be run, please refer to each command inside the *Commands* section below.

### General Notes

PotatOS M6 is case sensitive. Meaning that “subdir” and “SUBDIR” are not the same thing. You must include case in all decisions that you make. There is also a star functionality. When accessing a file, you can use stars ‘\*’ as a wild card. Examples below:

* To list all text files
  + *ls \*.txt*
* To list all files named test
  + *ls test.\**

### Change Directory

Description:

The user can change their Current Working Directory (CWD) by issues the *cd* command. When PotatOS M6 is first loaded, the CWD will be the root directory. The *cd* command has no optional arguments. The destination directory, *<dest dir>*, must always be used. You can also use the “..” command with *cd.* The “..” command will take you to the previous directory if it is possible.

Options:

The *cd* command has no arguments.

Examples:

* To change directory to a directory called SUBDIR
  + *cd SUBDIR*
* To change directory to the parent, previous, directory
  + *cd ..*

### Exit

Description:

The user can safely shut down PotatOS M6 by using the *exit* command. During the shutdown process, the exit process will safely write all changes to the image and close the image safely. Note: the user will have to confirm their shutdown request. The user can issue the exit command at anytime.

Options:

The *exit* command has no arguments.

Examples:

* To shutdown PotatOS M6
  + *exit*

### Help

Description:

The user can use the help command to request a help page for any other command. If you use help without any parameters, it will return a list of all the commands that you can request a help page for. You can request the help page for any command appending the desired command to the end of a new help command request. This will print out the help page for that specific command.

Options:

The help command has one optional command.

* <command name> - If you want to view the help page of a specific command, you append the desired command name to the help command.

Examples:

* To request the list of commands that you can view the help page for
  + *help*
* To request the brief help page for a certain command
  + *help cd*
* To request the full help page for a certain command
  + *help type*

### List

Description:

The user can show all the files in your current working directory

Options:

The Delete PCB command has one optional argument

* <file name> - If *ls* is used with a specific file, it will display extra information about that file

Examples:

* To list all the files in your current working directory
  + *ls*
* To see more information about the file “example.txt”
  + *ls example.txt*

### Move

Description:

The user can move a file to another location as long as the new location is one directory before or after the files location.

Options:

The move command has two arguments

* <file> - The file or directory to be moved
* <new dir> - The destination directory for the new file

Examples:

* To move the file “test.txt” to the directory “subdir”
  + *move test.txt subdir*
* To move the file “example.bat” to the parent directory
  + *move example.bat ..*

### Print Boot Sector Information

Description:

The user can see all of the boot sector information by issuing the print boot sector information.

Options:

The *pbsi* command has no arguments.

Examples:

* To see the Boot Sector Information
  + *pbsi*

### Print Root Dir

Description:

The user can print the contents of the root directory by issuing the *prd* command. This command will show the current contents of the root directory.

Options:

The *prd* command has no arguments.

Examples:

* To see the contents of the root directory
  + *prd*

### Rename

Description:

The user can rename a file to anything as long as it meets the FAT12 specifications. Both directories and files can be renamed.

Options:

The *rename* command has two arguments

* <current name> - The name of the current file/directory
* <new name> - The name that you wish to change the current name too

Examples:

* To rename the file “test.txt” to “example.txt”
  + *rename test.txt example.txt*
* To rename the directory “SUBDIR” to “CHILDDIR”
  + *rename SUBDIR CHILDDIR*

### Root

Description:

The root command will change the current working directory to the root directory. The user can issue this command at any time.

Options:

The *root* command has no arguments.

Examples:

* To change directory to the root directory
  + *root*

### Type

Description:

The user can print the contents of a file to the screen by using the *type* command. If the file’s contents will overflow the current terminal screen, type will use its paging function. While paging, you can iterate to the next page by pressing any key other than ‘q’. If the key ‘q’ is issued, you can exit the paging functionality.

Options:

The *type* command has one argument

* <file name> - The name of the file that will be printed

Examples:

* To print the file “test.txt”
  + *type test.txt*

# How to Get Help

The developers of PotatOS have mitigated as many errors as possible during the production of PotatOS. If you encounter any errors or bugs, please reach out to one of us to report this found error. We also encourage all PotatOS users to reach out to us for comments and suggestions. Below you will find the contact information for all the developers of PotatOS.

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